



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

[NRC-2014-0183]

Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants

AGENCY: Nuclear Regulatory Commission.

ACTION: Regulatory guide: issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing Revision 3 to Regulatory Guide (RG) 1.138, "Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants." This guide describes a method that the NRC staff considers acceptable for use in the laboratory testing of soils and rocks needed to comply with NRC requirements for the siting and design of nuclear power plants.

DATES: [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER.]

ADDRESSES: Please refer to Docket ID NRC-2014-0183 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2014-0093. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact

the individual(s) listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly available documents online in the NRC Library at

<http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "[ADAMS Public Documents](#)" and then select "[Begin Web-based ADAMS Search.](#)" For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. Revision 3 of Regulatory Guide 1.138 is available in ADAMS under Accession No. ML14289A600. The regulatory analysis may be found in ADAMS under Accession No. ML14289A602.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

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FOR FURTHER INFORMATION CONTACT: Scott Stovall, telephone: 301-251-7922, e-mail: Scott.Stovall@nrc.gov, or Edward O'Donnell, telephone: 301-251-7455, e-mail: Edward.Odonnell@nrc.gov. Both are staff of the Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

I. Introduction.

The NRC is issuing a revision to an existing guide in the NRC's "Regulatory Guide" series. This series was developed to describe and make available to the public such information as methods that are acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques that the staff uses in evaluating specific problems or postulated accidents, and data that the staff needs in its review of applications for permits and licenses.

Revision 3 of RG 1.138 was issued with a temporary identification as draft regulatory guide (DG)-1256. The guide describes laboratory investigations and testing practices acceptable to the NRC staff for determining soil and rock properties and characteristics needed for engineering analysis and design of foundations and earthworks for nuclear power plants. The guide was reformatted and was revised to reflect changes in standards for testing procedures developed since 2003. The most significant change is in Section C.6.3, "Resonant Column Tests," which provides an alternative method for resonant column and torsional shear testing of soil and rock samples.

II. Additional Information.

The DG-1256 was published in the *Federal Register* on August 4, 2014 (79 FR 45223), for a 60-day public comment period. The public comment period closed on October 3, 2014. No public comments were received.

III. Congressional Review Act.

This regulatory guide is a rule as defined in the Congressional Review Act (5 U.S.C. 801-808). However, the Office of Management and Budget has not found it to be a major rule as defined in the Congressional Review Act.

IV. Backfitting and Issue Finality.

Issuance of this guide in final form does not constitute backfitting as defined in § 50.109 10 of the *Code of Federal Regulations* (10 CFR) (the Backfit Rule) and is not otherwise inconsistent with the issue finality provisions in 10 CFR part 52. This guide would not apply to any construction permits, operating licenses, early site permits, or limited work authorizations already issued under 10 CFR 50.10 for which the NRC issued a final environmental impact statement (EIS) preceded by a draft EIS under 10 CFR 51.76 or 51.75, or combined licenses, any of which were issued by the NRC prior to issuance of the final regulatory guide. The NRC has already completed its siting determination for those construction permits, operating licenses, early site permits, limited work authorizations, and combined licenses. Absent voluntary action by the licensee (e.g., license amendment, exemption request), no further NRC regulatory action on siting will occur for those licenses, permits, and authorizations for which the guidance in the guide would be relevant. Licensees and holders of NRC regulatory approvals may perform testing of soils and rocks for engineering analysis and design activities consistent with the licensing basis for each permit and license. This testing need not comply with this regulatory guide. However, when a licensee or holder of an NRC regulatory approval voluntarily requests a change to its license or regulatory approval for which new soils or rock testing is

necessary and is an essential consideration of the NRC's evaluation of the request, then the NRC may condition its approval of the request on the licensee's or holder's agreement to conduct the soil or rock testing in accordance with the guidance in the guide.

The guidance in this regulatory guide may be applied to applications for early site permits, combined licenses, and limited work authorizations issued under 10 CFR 50.10 (including information under 10 CFR 51.49(b) or (f)), any of which are docketed and under review by the NRC as of the date of issuance of the final regulatory guide. The guidance in this regulatory guide may also be applied to applications for construction permits, early site permits, combined licenses, and limited work authorizations (including information under 10 CFR 51.49(b) or (f)), any of which are submitted after the issuance of the final regulatory guide. Such action does not constitute backfitting as defined in 10 CFR 50.109(a)(1) and is not otherwise inconsistent with the applicable issue finality provisions in 10 CFR part 52. Applicants and potential applicants are not, with certain exceptions, protected by either the Backfit Rule or any issue finality provisions under part 52.

Dated at Rockville, Maryland, this 18th day of December 2014.

For the Nuclear Regulatory Commission.

Harriet Karagiannis, Acting Chief,
Regulatory Guidance and Generic Issues Branch,
Division of Engineering,
Office of Nuclear Regulatory Research.

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